

Transportation Analysis

State of Minnesota
Department of Transportation

Bureau of Policy and Planning

DEPARTMENT Mn/DOT - Transportation Forecasts
Room 813

Office Memorandum

TO : Merritt Linzie
District 9 - Oakdale

DATE: September 26, 1978

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S.P. 1901
SUBJECT: TH 13, 55, 110 (Mendota Interchange)
SPAR M-221

Year 1983, 1993, and 2003 ADT and peak hour volumes for alternate designs in the TH 13, 55, and 110 interchange area are enclosed. A table of year 2003 point-to-point movements has also been prepared. Volumes shown are based on the Metropolitan Council's year 2000 zone level vehicle trip tables assigned to network 1-C.

An assignment of year 2000 vehicle trips has been made to a network from which TH 35E in St. Paul has been removed. The results of this assignment as they apply to the Mendota Bridge interchange are discussed below.

The district has requested an estimate of the one hour average of the high eight hours of the average day on mainline segments. This can be calculated by multiplying the ADT by .0625.

The year 2003 volumes shown in this report are substantially lower than those shown in SPAR M-180 (Jan., 1977). There are two reasons for this. One is that the TH 55 (Hiawatha) freeway, assumed in System 16 and in the BRW-4 networks, is not included in network 1-C. The other is that forecasts of trip generation in Dakota County have been reduced significantly from the levels expected earlier. A comparison of old and new trip generation forecasts will be found in SPAR M-215.

The year 2003 volume shown on the Mendota Bridge (43,000) is not much greater than current counts. The main reason for the apparent lack of growth is that much of the east-west through traffic that would have used the Mendota Bridge has been diverted to TH 494 on network 1-C. When the year 2000 trip table is assigned to the 1975 network, the Mendota Bridge has a two-way ADT of 111,200.

The removal of TH 35E in St. Paul from network 1-C does not have a significant effect on volumes in the Mendota interchange area. The year 2003 ADT volumes on the Mendota Bridge increase by a total of 4000 two-way trips. Of this number, 2600 trips turn south on TH 55 to use either TH 55 or TH 13, and 1400 continue east on TH 110.

SPAR M-221

TH 110-55-13 2003 ADT

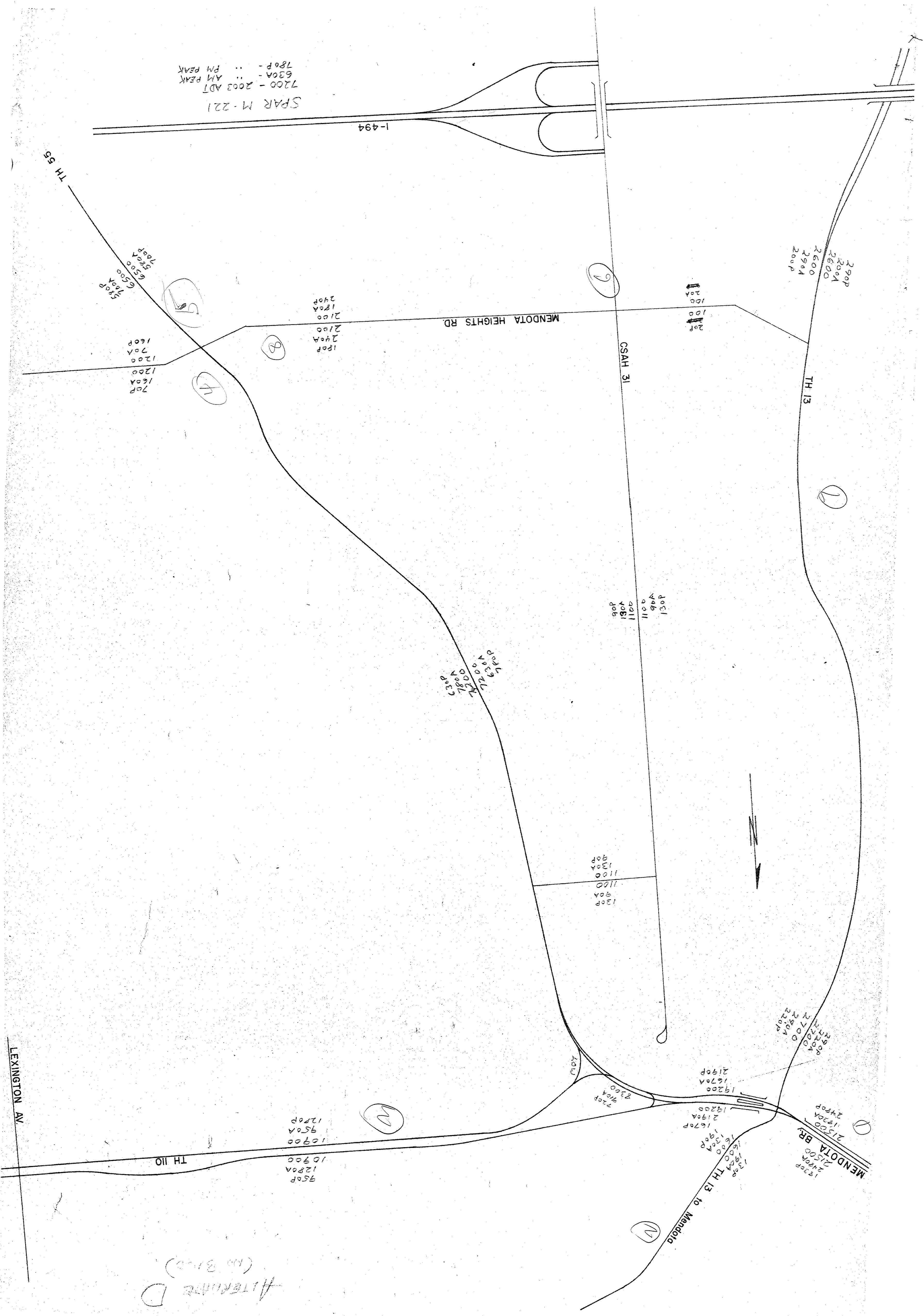
	1	2	3	4	5	6	7	8	T
1	—	600	10500	500	5900	1100	2100	800	21500
2	600	—	400	0	0	100	500	0	1600
3	10500	400	—	0	0	0	0	0	10900
4	500	0	0	—	0	0	0	700	1200
5	5900	0	0	0	—	0	0	600	6500
6	1100	100	0	0	0	—	0	0	1200
7	2100	500	0	0	0	0	—	0	2600
8	800	0	0	700	600	0	0	—	2100
T	21500	1600	10900	1200	6500	1200	2600	2100	

2003 PM PEAK

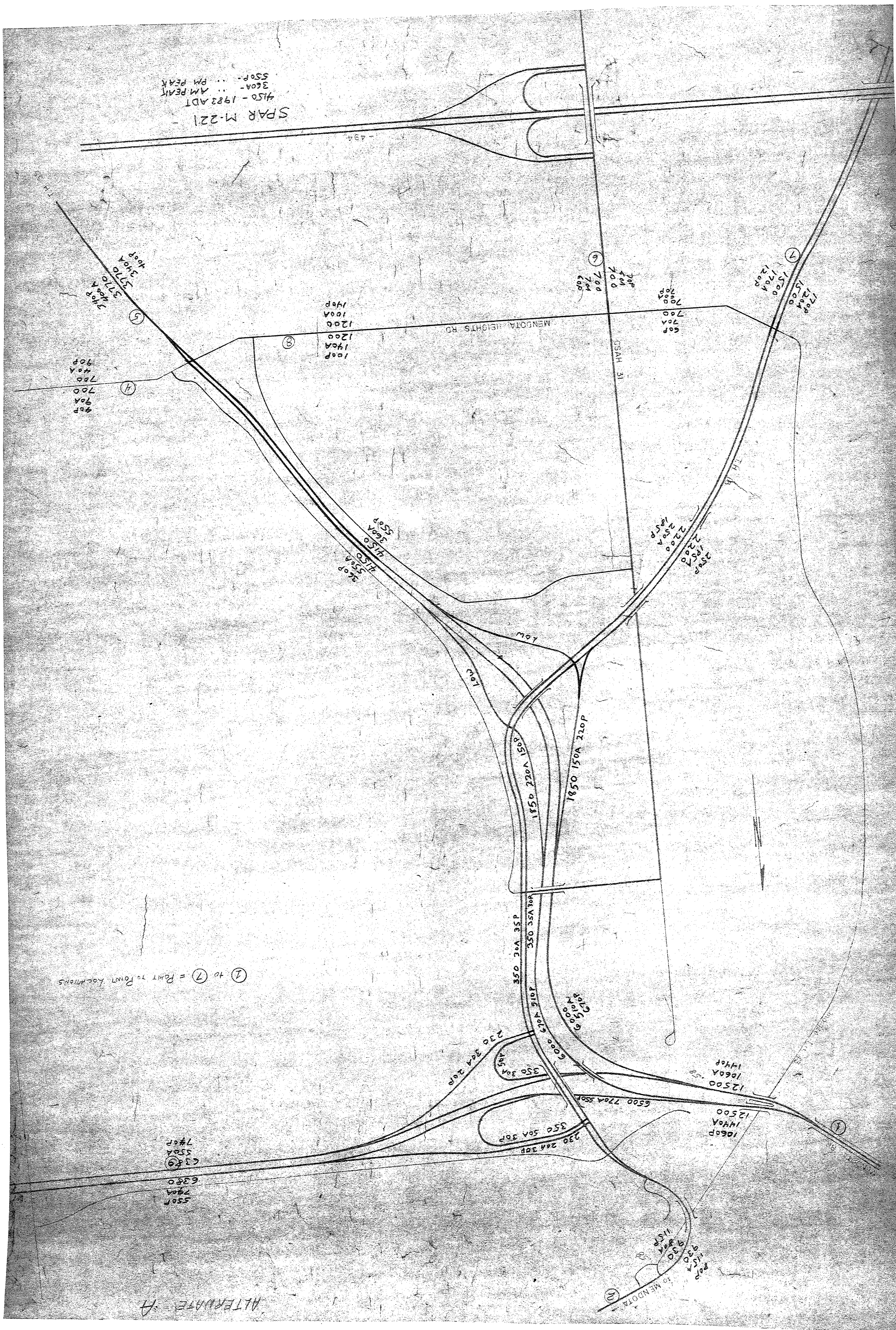
	1	2	3	4	5	6	7	8	T
1	—	80	1250	60	650	130	240	70	2480
2	50	—	30	0	0	0	50	0	130
3	900	50	—	0	0	0	0	0	950
4	40	0	0	—	0	0	0	30	70
5	500	0	0	0	—	0	0	80	580
6	90	20	0	0	0	—	0	0	110
7	160	40	0	0	0	0	—	0	200
8	90	0	0	100	50	0	0	—	240
T	1830	190	1280	160	700	130	290	180	

2003 AM PEAK

	1	2	3	4	5	6	7	8	T
1	—	50	900	40	500	90	160	90	1830
2	80	—	50	0	0	20	40	0	190
3	1250	30	—	0	0	0	0	0	1280
4	60	0	0	—	0	0	0	100	160
5	650	0	0	0	—	0	0	50	700
6	130	0	0	0	0	—	0	0	130
7	240	50	0	0	0	0	—	0	290
8	70	0	0	30	80	0	0	—	180
T	2480	130	950	70	580	110	200	240	

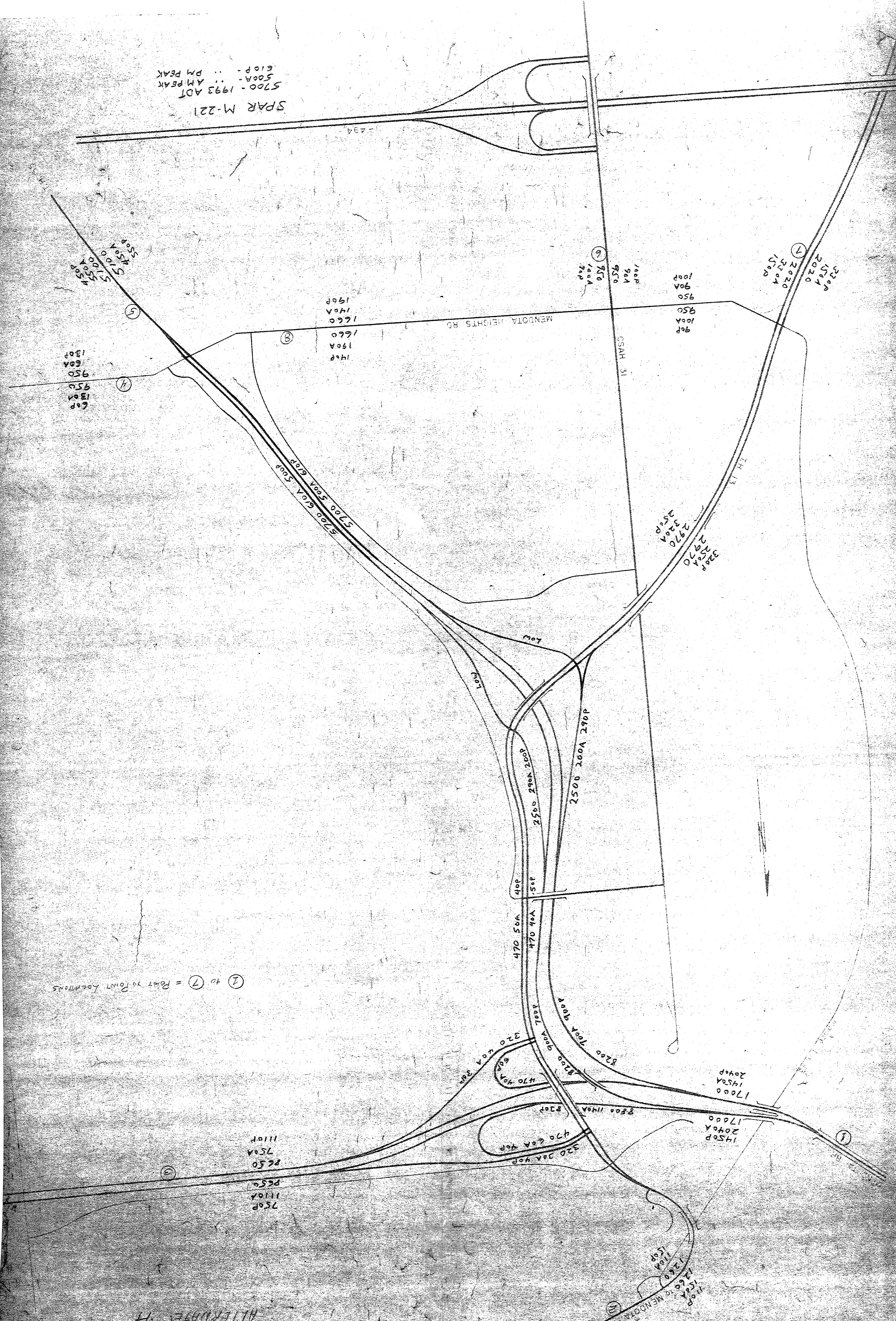


ALTERNATE D
(10/31/00)



ALTERNATE A

② to ⑦ = Point to Point Locations



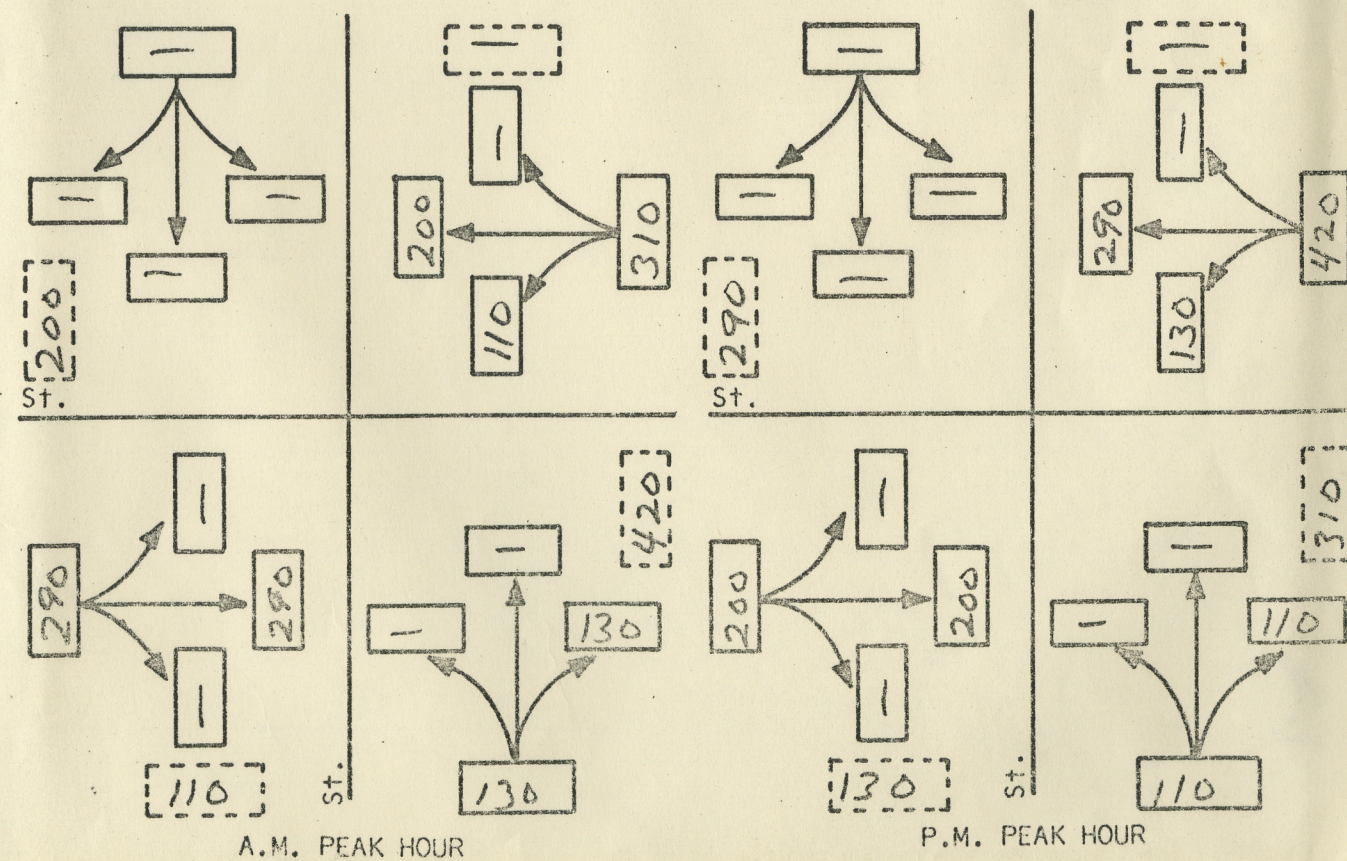
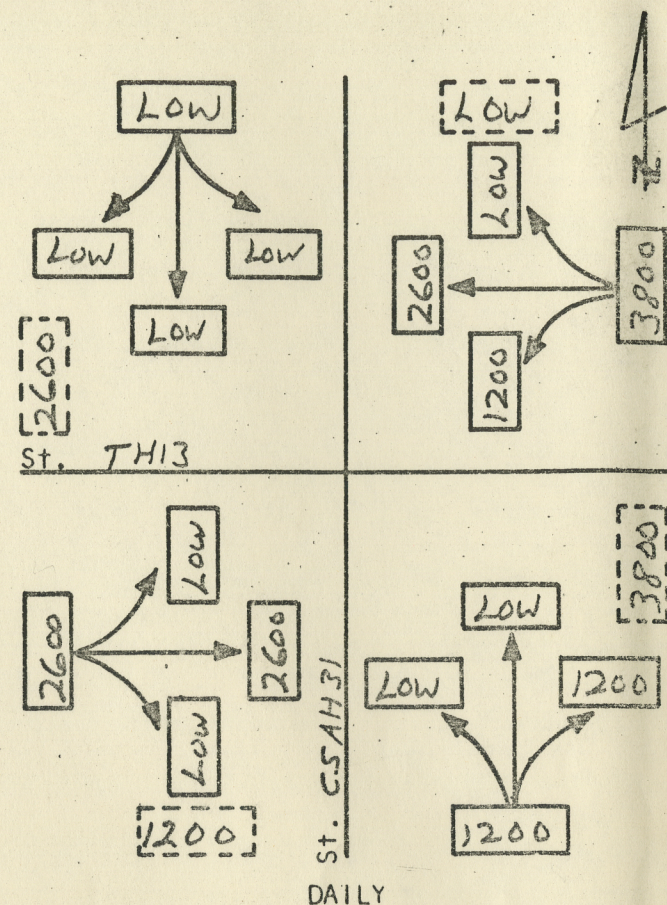
SPAR M-221
5700-1993 ADT
5000-1993 ADT
5100-1993 ADT

ALTERNATE B

SCHEMATIC TURNING MOVEMENT

Year 2003 Traffic VolumesCity or County DAKOTALocation TH13 and CSAH31System I-CSPAR M-221 Date SEPT, 1978

DATA SOURCE:

Computer Output Analysis Traffic Count COMMENTS: At grade inter-
section assumed.

ALTERNATE C

